IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier version and listings.

1. (currently amended): An image ratio measuring method in an image forming apparatus for executing image formation by depositing a coloring material on a print medium based on image data, the method comprising:

an input step of entering image data;

~~a conversion step of converting the entered image data into image data having a linear relationship with the image density;~~

a first conversion step of executing γ-conversion to the image data entered in said input step;

an image forming step of executing an image formation based on the image data converted in said first conversion step;

a second conversion step of converting the image data before being subjected to the γ-conversion in said first conversion step into image data having a linear relationship with the image density; and

a calculation step of calculating an image ratio, based on the number of pixels in which ~~said~~ the coloring material is deposited onto ~~said~~ the print medium based on the image data converted in said second conversion step, the number of pixels corresponding to the size of ~~said~~ the print medium, and the number of gradation levels per pixel.

2. (currently amended): A method according to claim 1, wherein said second conversion step ~~executes~~ includes executing conversion [[to]] of image data normalized with the density scale in the pixel unit.

3. (currently amended): A method according to claim 1, wherein said calculation step ~~calculates said~~ includes calculating the image ratio by dividing the number of pixels of deposition ~~to said~~ on the print medium by a value obtained by multiplying the total number of pixels corresponding to the size of ~~said~~ the print medium with ~~said~~ the number of gradation levels.

4. (currently amended): A method according to claim 1, further comprising a second calculation step of calculating the consumption amount of the coloring material consumed in the image formation, based on ~~said~~ the image ratio.

5. (currently amended): A method according to claim 4, wherein said calculation step ~~calculates~~ includes calculating the consumption amount of the coloring material by multiplying the consumption amount of the coloring material in a unit area in a solid image formation, ~~said~~ the image ratio and the size of the ~~recording sheet~~ print medium.

6. (currently amended): A method according to claim 1, wherein said input step ~~enters~~ includes entering image data matching the characteristics of ~~said~~ the image forming apparatus, and the method further comprises an image forming step of

executing image formation based on the image data matching the characteristics of ~~said~~ the image forming apparatus.

7. (currently amended): A method according to claim 4, further comprising:

an accumulation step of accumulating the consumption amount of ~~said~~ the coloring material;

a detection step of detecting the remaining amount of ~~said~~ the coloring material, from the accumulated value accumulated in said accumulation step and an initial amount of ~~said~~ the coloring material;

a discrimination step of discriminating whether an instructed image formation can be executed with the remaining amount detected in said detection step; and

a warning step of warning in a case in which it is discriminated in said discrimination step ~~identifies~~ that the execution is not possible.

8. (currently amended): An image forming apparatus comprising:

input means for entering image data;

~~conversion means for converting the entered image data into image data having a linear relationship with the image density;~~

first conversion means for executing γ-conversion on the image data entered by said input means;

image forming means for executing an image formation based on the image data converted by said first conversion means, by depositing a coloring material on a print medium;

second conversion means for converting the image data before being subjected to the γ-conversion by said first conversion means into image data having a linear relationship with the image density; and

calculation means for calculating an image ratio, based on the number of pixels in which ~~said~~ the coloring material is deposited onto ~~said~~ the print medium based on the image data converted [[in]] by said second conversion means, the number of pixels corresponding to the size of ~~said~~ the print medium, and the number of gradation levels per pixel.

9. (currently amended): An apparatus according to claim 8, wherein said second conversion means executes conversion [[to]] on image data normalized with the density scale in the pixel unit.

10. (currently amended): An apparatus according to claim 9, wherein said calculation means calculates ~~said~~ the image ratio by dividing the number of pixels of deposition ~~to said~~ onto the print medium by a value obtained by multiplying the total number of pixels corresponding to the size of ~~said~~ the print medium with ~~said~~ the number of gradation levels.

11. (currently amended): An apparatus according to claim 8, further comprising a second calculation means for calculating the consumption amount of the coloring material consumed in the image formation, based on ~~said~~ the image ratio.

12. (currently amended): An apparatus according to claim 11, wherein said calculation means calculates the consumption amount of the coloring material by multiplying the consumption amount of the coloring material in a unit area in a solid image formation, ~~said~~ the image ratio and the size of the ~~recording sheet~~ print medium.

13. (currently amended): An apparatus according to claim 8, wherein said input means enters image data matching the characteristics of said apparatus, and ~~the~~ said apparatus further comprises image forming means for executing image formation based on the image data matching the characteristics of said apparatus.

14. (currently amended): An apparatus according to claim 11, further comprising:

accumulation means for accumulating the consumption amount of ~~said~~ the coloring material;

detection means for detecting the remaining amount of ~~said~~ the coloring material, from the accumulated value accumulated in said accumulation means and an initial amount of ~~said~~ the coloring material;

discrimination means for discriminating whether an instructed image formation can be executed with the remaining amount detected [[in]] by said detection means; and

warning means for warning in a case in which said discrimination means identifies that the execution is not possible.

15. (currently amended): An image forming system ~~provided with~~ comprising:

an image data supplying apparatus[[,]];

an image processing apparatus for applying a predetermined process including a γ-conversion process to ~~said~~ the image data;~~, and~~

an image forming apparatus for executing image formation based on ~~said processed~~ the γ-converted image data;~~, comprising:~~

conversion means for converting the image data ~~from said supplying apparatus~~ before being subjected to the γ-conversion process to image data having a linear relationship with the image density;

first calculation means for calculating an image ratio based on the number of pixels in which ~~said~~ the coloring material is deposited onto ~~said~~ the print medium based on the image data converted [[in]] by said conversion means, the number of pixels corresponding to the size of ~~said~~ the print medium, and the number of gradation levels per pixel; and

second calculation means for calculating the consumption amount of ~~said~~ the coloring material based on the image ratio calculated by said first calculation means.

16. (new): A method according to claim 1, further comprising a second calculation step of calculating a consumption amount of the coloring material in case of executing the image formation based on the γ-converted image data, on the basis of the image ratio calculated in said calculation step.

17. (new): An apparatus according to claim 8, further comprising second calculation means for calculating a consumption amount of the coloring material in case of executing the image formation based on the γ-converted image data, on the basis of the image ratio calculated by said calculation means.